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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/323,767	06/01/1999	DEREK MCAULEY	1018.008US1	9618

26119 7590 08/13/2003

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EXAMINER

NGUYEN, HANH N

ART UNIT	PAPER NUMBER
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2662

DATE MAILED: 08/13/2003

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Please find below and/or attached an Office communication concerning this application or proceeding.

10

Office Action Summary

Application No.

09/323,767

Applicant(s)

MCAULEY ET AL.

Examiner

Hanh Nguyen

Art Unit

2662

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on Application filed on 06/01/99.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-43 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6,8-33,35-38 and 41-43 is/are rejected.
- 7) ☒ Claim(s) 7,34,39 and 40 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☒ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 4.
- 4) ☐ Interview Summary (PTO-413) Paper No(s) _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-11, 12-23, 24-28, 29-40, 41-43 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claims 1, 12, 24, 29 and 41, what is the purpose of determining at least one channel of the plurality of related channels other than the congested channel to have decreased transmission of packets. ?. Applicant is required to specify what the "ECN event" means in each claim wherein the "ECN event" is disclosed.

In claims 8 and 35, What does it means by "determining at least one channel at the computer program." ?

Claims 2-11, 13-19, 25-28, 30-40, 42 and 43 are rejected because they depend on claims 1, 12, 24, 29 and 41 respectively.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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Claims 1, 3-6, 9-21, 24-27, 29, 31-33, 36-38 and 41 are rejected under 35 USC 103(a) as being unpatentable over **Chuah** (US Pat. No. 6,469,991 B1) in view of **Newman** (US Pat. No. 5,457,687).

In claims 1, 12, 24, 29 and 41, **Chuah** discloses, in Fig.2, a computer network comprising personal computers 232 (source devices), Internet 244 (a network layer), base station 236 (policy mechanism). See col.8, lines 25-55. A remote user at one of PCs 232 transmits packets to base station 236 on a channel allocated with bandwidth (source device sending a packet to destination device). See col.9, lines 5-15. When the channel is busy (channel is congested), base station 236 sends a flow control signal (congestion notification) to the remote user and determine whether this is caused by the remote user or other remote users. If caused by the other remote users, base station elects any remote user (a channel other than the congested channel) to reduce bandwidth (determining at least one channel other than the congested channel to have the decreased transmission of packets). See Abstract. **Chuah** does not disclose an ECN event triggered when the channel is congested. **Newman** discloses when a channel is congested, an explicit congestion notification (ECN) signal is transmitted back to a source of the channel currently submitting traffic (triggering ECN event). See Abstract.

Since **Chuah** discloses a computer network transmitting packets to Internet, therefore; it would have been obvious to implement the flow control signal of **Chuah** by having Explicit Congestion Notification event of **Newman** to notify a congested channel to the source.

In claims 3, 13, 14, 25, 26 and 31, **Chuah** discloses the network comprising Internet 214 (Internet) and TCP/IP used to transport packets (IP layer). See col.8, lines 50-65.

In claims 4 and 32, the limitations of these claims have been addressed in claim 1.

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In claims 15 and 16, **Chuah** discloses base station 236 (policy mechanism) is connected to Internet (Policy mechanism is at network). See col.8, lines 40-50.

In claims 5 and 17, the limitations of these claims have been addressed in claim 1.

In claims 18, 19, 20 and 21, the limitations of these claims have been addressed in claim 1.

In claims 6, 9, 11, 33, 36 and 38, the limitations of these claims have been addressed in claim 1.

In claims 10 and 37, the limitations of these claims have been addressed in claim 1.

In claim 27, **Chuah** discloses a plurality of remote hosts 232, each corresponding to a Channel (a plurality of channels). See col.9, lines 5-15.

Claims 2, 22, 23, 28, 42 and 43 are rejected under 35 USC 103(a) as being unpatentable over **Chuah** (US Pat. No. 6,469,991 B1) in view of **Newman** (US Pat. No. 5,457,687), and further in view of **Odlyzko** (US Pat. No. 6,295,294 B1).

In claims 2, 22, 23, 28 and 42, **Chuah** disclose a network wherein a user channel with higher priority than others is allocated more bandwidth while reducing bandwidth of lower priority channels. See Abstract. **Chuah** does not disclose a pricing criteria applied to channels. **Odlyzko** discloses a network is partitioned into logical channels and each user incurs a cost for use of each selected logical channel. The QOS of channels is different with respect to the cost of user. Lower cost channels carry more traffic (more congested) and Highest cost channels carry least traffic (least congested). See Fig.2B & Abstract. Therefore, it would have been obvious to

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combine the teaching of **Odlyzko** with that of **Chuah** to avoid congestion because each use is reserved a guaranteed service on a selected channel associated with the charges.

In claim 43, **Chuah** does not disclose at least one queue associated with a filter. **Odlyzko** discloses FIFO queue that store packets as they are transmitted (at least one queue). See col.6, lines 14-16. Therefore, it would have been obvious to modify the base station of **Chuah** in such a way the queue of the base station is associated with a filter in order to store packets corresponding to different services.

Allowable Subject Matter

Claims 7, 34, 39 and 40 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter:

In claims 7, 34, 39 and 40, the prior art does not disclose at least one channel at a layer higher than a destination protocol layer receiving the packet sent by the source protocol layer.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Rubino et al. (US Pat. No. 6,424,629 B1) discloses Expediting Reconvergence in a Routing Device.

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Packer et al. (US Pat. No. 6,456,630 B1) discloses Method and Data Rate Control for Heterogenous or Peer Internetworking.

Jabbarnezhad (US Pat. No. 6,388,988 B1) discloses Method and System for Automatic Line Protection Switching of Embedded Channels.

Ikeda (US Pat. No. 5,719,853) discloses Congestion Control Method in an ATM Network Based on Threshold Values of Nodes Queue Length.

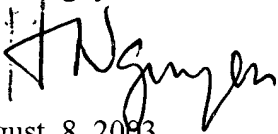
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hanh Nguyen whose telephone number is 703 306-5445. The examiner can normally be reached on Monday-Friday 8:30 AM - 5:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hassan Kizou can be reached on 703 306-4744. The fax phone numbers for the organization where this application or proceeding is assigned are 703 872-9314 for regular communications and 703 308-9051 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703 305-4700.

Fax: (703) 872-9314

Hanh Nguyen

A handwritten signature in black ink, appearing to read 'Hanh Nguyen', written over a vertical line.

August 8, 2003

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